## Abstract

Apparatus and associated method for identifying defects on objects provide for - under computer driving - the AC voltage energization of at least one transmitting coil to be simultaneously effected by a carrier signal, and for an essentially amplitude-modulated received signal to be received by means of at least one receiving coil; what is carried out, furthermore, is a demodulation not only of the carrier signal contained in the received signal by means of magnitude and phase formation, but also a demodulation of the harmonics of the carrier which are contained in the received signal, likewise by means of respectively associated magnitude and phase formation, to be precise preferably by using a Fourier or wavelet transformation method.